

Safety Review Committee
August 20, 2004
10:00 AM – 12:00 PM

Minutes

Members Present

Joel Ager, Michael Banda, John Bercovitz, Ben Feinberg (Chair), Richard Kadel, Peter Seidl, Scott Taylor, Weyland Wong, Linda Wuy, Hisao Yokota

Members Absent

Dennis Collins, Sharon Doyle, Kenneth Fletcher Mack Kennedy, Peter Lichty, Don Lucas, Augusto Macchiavelli, Linfeng Rao, Linda Smith,

Others Present

Bo Bodvarsson, John Chernowski, Rick Gough, Phyllis Pei, Mike Ruggieri, Pat Thomas (Secretary), Robin Wendt, Otis Wong

Minutes of July Meeting

Ben Feinberg requested that the minutes include a statement that the next Advanced Light Source (ALS) Management of Environment, Safety, and Health (MESH) review will be held in 3 years. It was moved, seconded, and carried to accept the July minutes with the addition.

Comments from the Chair

The new Environment, Safety, and Health (EH&S) Division Director, Phyllis Pei, was introduced to the Committee.

Physics Division has had their Integrated Safety Management (ISM) Board review. Their next MESH review will be held in 2 years.

New SRC Representatives will be appointed for the Directorate and ALS. Once the representatives have been selected, EH&S Division will prepare the appointment memos for LBNL approval.

Earth Sciences Division MESH

Bo Bodvarsson, Director of the Earth Sciences Division (ESD), responded to the MESH review committee report. The review was led by Hisao Yokota. The other reviewers were Michael Banda and Maram Kassis. Otis Wong provided support from the Office of Assessment and Assurance. Hisao Yokota thanked Otis Wong and the team members for their support, and commended Bo for his active role in implementing safety improvements. Randy Hedegaard, the previous Division Safety Coordinator, helped to pull together the documentation for the review. The last review of ESD was very critical. The new director has made significant improvements to the safety program.

Bo welcomed the new EH&S Division Director and thanked the previous director, David McGraw, for his assistance in improving the safety program. Bo explained that the division is organized by two criteria, the scientific program each person is currently working on, and

resource department representing the person's area of expertise. Each person reports to a supervisor in their resource department and a principal investigator in their scientific program. The division management, support staff, and committees provide leadership and support to the programs. Key personnel include Division Deputy Ernie Majer, Safety Coordinator Jil Geller, EH&S Liaison Mike Rugieri, and Safety Committee Chair Peter Persoff. Extensive quality control support is required because of the division's work on nuclear waste issues. The funding sources vary by scientific program. There are about 220 people in the division. Hydrology and Geochemistry are the largest groups.

ESD is proud of achieving all "green" scores on their annual ES&H Self-Assessment Report. They were one of the divisions that participated in the ergonomics pilot project. The Safety Committee meets quarterly. A critical action item list is discussed at the beginning of each meeting. One of their safety challenges is that the division has people scattered in several different buildings on site, as well as people working off site and on campus. They work in offices, laboratories, and in the field. The division has identified a principal investigator and department head responsible for each work space. Walkthroughs are performed by the safety coordinator (monthly), the department heads (quarterly), and the division director (every 6 months).

Hazards are tracked on the HEAR and CMS databases. ESD requires principal investigators to complete an Off-Site Safety and Environmental Protection Plan (OSSEPP) for all off-site research activities. The OSSEPP documents hazards, training requirements, protective measures, and emergency information. It is posted at the work site and serves as a safety-training document. An approved OSSEPP is required before travel is authorized for the off-site work.

The MESH review identified 11 Noteworthy Practices:

- 1) Safety culture in division improved;
- 2) Safety lines of authority clearly identified;
- 3) Extremely functional safety website;
- 4) Lab "primer" safety manual in each lab;
- 5) Successful ergonomics program;
- 6) Formal authorization process improvements;
- 7) No reportable Occurrences in 6 years;
- 8) No recordable accidents in 2 years;
- 9) All "greens" for 2 years;
- 10) Active and involved inspection program;
- 11) Effective at addressing safety findings;

2 Concerns:

- 1) One PI did not appear conversant with safety regulations and responsibilities;
- 2) First Aid, CPR and Fire Extinguisher courses required on OSSEPP forms not completed;

and 6 Observations:

- 1) One PI did not appear knowledgeable of safety regulations and responsibilities;
- 2) New authorizations not on Safety Analysis Review form;

- 3) OSSEPP needs to be more succinct;
- 4) Annual review of OSSEPPS not documented well;
- 5) Four workspace findings identified on workspace walkthrough;
- 6) Only 8 LCATS were entered in PY03 (84 in PY 04).

The PI of concern has a good safety record and may just have not interviewed well on the day the MESH team visited. The division plans to identify any employees that lack the necessary safety knowledge and provide training.

The OSSEPPS and Safety Analysis Review (SAR) forms and process are being reviewed by the division and will be improved.

The four workplace findings included an inoperable UV lockout switch (repaired), a refrigerator too close to a lab (being moved), a glass carboy needing seismic restraint (now restrained), and equipment in a cluttered, unsecured space in the Bevatron (being moved).

Several opportunities to improve communications were identified and are in the process of being implemented. A "Town Hall" meeting was held. The division director discussed SAA compliance, and the importance of not doing hazardous work while under medication that may affect behavior.

Other plans for safety program improvements include continuing to integrate safety into research and planning activities, improving use of the LCATS and chemical inventory programs, restructuring the safety committee, and working with Facilities and LBNL management on institutional problems.

The mine safety-training program for Yucca Mountain workers is a good one and may also be useful for Physics Division employees who enter mines. Los Alamos has developed a good training program for volcanologists that work in remote locations.

Accelerator and Fusion Research Division MESH

Rick Gough, Acting Director of the Accelerator and Fusion Research Division (AFRD), responded to the MESH review committee report. The review was led by Augusto Macchiavelli. The other reviewers were Dennis Collins and Linda Smith. John Chernowski provided support from the Office of Assessment and Assurance. John thanked the review team members, AFRD Director Bill Barletta, and Acting Director Rick Gough. John said the review team found that AFRD has strong senior management support and effective management of ES&H. The QUEST self-assessment program involves all staff. The division has some space challenges, with excess equipment and old buildings with seismic problems and leaky roofs.

Rick Gough welcomed Phyllis Pei and commented that one of AFRD's strengths is a close working relationship with EH&S Division, through the EH&S Liaison, Tom Caronna. Rick reviewed the organization chart for AFRD. The division has the following programs: Advanced Light Source Accelerator Physics, Ion Beam Technology, Fusion Energy Research, and Superconducting Magnets. There have been some recent changes. Division Director Bill Barletta has been placed on temporary assignment to the UC Office of the President to work on

the LBNL Management Contract proposal. Rick Gough is serving as Acting Director of AFRD and continuing as Program Head for Ion Beam Technology. John Corlett is Acting Program Head for Center for Beam Physics. Most of the AFRD programs have experimental activities, with a variety of potential hazards. Fusion Energy Research is part of a Virtual National Laboratory collaboration with Princeton Plasma Physics Lab and Lawrence Livermore. AFRD has accelerator physicists matrixed to the Advanced Light Source, and there are many Engineering Division employees matrixed to AFRD.

The MESH review team visited buildings 71, 16, 52, and 58/58A. The team conducted interviews and discussions with selected people. The team found that “overall, AFRD has an outstanding safety program with dedicated division managers, highly effective division safety officers, and a committed staff.” There were 7 Noteworthy Practices:

- 1) AFRD takes responsibility for student safety;
- 2) Close relationship with ALS and Engineering results in proactive assignment of safety responsibilities among matrixed staff;
- 3) Management takes active role in staff safety;
- 4) Bilateral MOU with Oak Ridge regarding training;
- 5) ISM Plan requires annual Director’s safety meeting with Programs;
- 6) Line managers held accountable for safety;
- 7) ES&H management structure is highly effective.

The team also found some opportunities for improvement. These were a mixture of divisional and institutional issues. There were 3 observations:

- 1) The HEAR client input form would benefit from some minor improvements;
- 2) Several minor hazards were not appropriately controlled;
- 3) Only 59% of employees completed ergonomic workstation evaluations;

and 3 concerns:

- 1) Significant space limitations could be partially alleviated by removal of equipment no longer in use;
- 2) Many LCATS items are not resolved in a timely manner; and
- 3) Significant safety challenges (seismic, roof leaks) in some buildings.

Corrective actions identified by AFRD included:

- identifying microwaves and silver soldering on the HEAR database, while working with EH&S to improve the input form;
- posting current AHDs, seismic bracing for a control rack, requesting repair of a tripping hazard, and clearing space in front of electrical panels;
- requiring and scheduling ergonomic evaluations for people who work at computers 4 hours or more per day;
- identifying excess equipment, working with Facilities to have it removed, and reviewing warehouse storage justifications;
- reviewing LCATS assignments and priorities discussing LCATS completion in safety meetings, and enhancing review of proposed construction projects to avoid creating new problems; and
- working with the Directorate and Facilities to encourage funding of building improvements.

SRC members contributed several helpful comments during the discussions, including:

- Rules regarding electrical panel clearance should be discussed in the Introduction to EH&S at LBNL course for new employees;
- Walkthrough training for supervisors could be added to the ES&H for Supervisors class;
- AFRD could expedite completion of ergonomic evaluations by having more people trained as evaluators;
- Warehouse storage policies should be examined separately as an institutional concern. Other divisions have also had problems locating equipment sent to storage. The description information on the property database sometimes does not contain enough information. ALS keeps photos and records of equipment in storage. Ben Feinberg will draft a note regarding the safety implications of storage issues;
- Some databases are not sufficiently user friendly. There need to be more linkages between systems.

News Briefs from Robin Wendt

As a result of a study of LBNL internal audit and assessment practices, there may be some changes coming to the organizational structure that could affect the Office of Assessment and Assurance.

The new DOE BSO-LBNL Operating Principles signed by Steven Chu and Dick Nolan call for open and unfettered access to information by DOE. There is some concern that the presence of DOE personnel during some self-assessment and internal review activities, such as MESH reviews, Radiation Safety Committee reviews, or Human Welfare Committee reviews, may stifle self-criticism and open discussion of problems. LBNL management should take a careful look at how executive committees are defined.

The meeting was adjourned at 12:00 noon.

Respectfully submitted,

Patricia M. Thomas
SRC Secretary